

Work Order ID 54886

January 5, 2010 8:08:00 AM



Page 1

Item ID: D119-646-243

Left Hand

Accept



Setup Start



Revision ID:

Stop



Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

RP

Date: *10-1-05*

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3905

B

IIN-D119-646

B

100

0.00



DC

Document Control

Memo

Photocopy bluefile & type labels per PPP D119-646-243
CHG 001

0.00

N/A

110

0.00



Skidtubes

Skidtubes

Memo

1- Inspect Mat'l D2500-1-190 for damage
2- Ensure squareness of ends

0.00

DP 10-1-6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

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Customer:

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Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

Chemical Conversion Coat per QSI005 4.1

0.00

DP

10-1-6



HandFinish

Memo

0.00

Hand Finishing

130

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

u 10/1/6

Quality Control

150

0.00



Skidtubes

Memo

0.00

Skidtubes

1- Install drill jig DT9480 drill all x-bolt spacer holes using 3/16 drill

2- Scribe batch # inside aft end of tube

DP 10-1-6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Required Date: 18/01/2010 Req'd Qty: 1.00

Customer:

Reference:

Run Start

Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

~~160~~ 170



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

25.25"

0.00

28 10/06/07



~~170~~ 160



CNC Bend 1

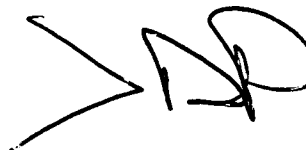
CNC Delta 100 Bender

Memo

0.00

1- Bend AFT end of tube using CNC Bender 1 and bend prog. D3905 AFT as per dwg D3905. Must use bending Aid DT9538, located 23.25" from Aft end.

2- Ensure bending Aid DT9538 is positioned correctly, that the bender set up in on full wide and that the indexing ridge is covered with graphite grease.



10-1-7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Cust Item ID:

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Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

180

0.00



Skidtubes

0.00

Skidtubes

Memo

1- Verify dimension of bend as per dwg D3905

2- Buff out marks left from bending.

3- Drill Aft Float bag holes using DT9493 as per dwg D3905 detail G and section F-F, open to finished size

4- Drill Aft wearplate and wearpad holes using DT _____ and DT _____ as per dwg D3905 detail G open to finished size

5- Open x-bolt spacer holes to finished size as per dwg (sections D-D and E-E)
DO NOT OPEN FWD SADDLE HOLES

6- Deburr, blow out chips from inside of tube

7-Bond web in place as per Dwg D3905 & QSI 015.

A/R: Sikaflex-291 M 11 2 2005

Sikaflex expire date: 10/17/20

Start: 10/11/15 Time: 10:30 am

Finish: 10/11/20 Time: 11:30 am

***** (Adhere for 12 hours) *****

AWM 10-01-09

DP 10-1-15

W 10/11/15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

190

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control



ZE 10/01/10

200

0.00



CNC Bend 1

Memo

0.00

CNC Delta 100 Bender

1- Bend Fwd end of tube using bender 1 and bend prog. D3905 Fwd. Use bending aid DT9544 ensure proper positioning

2- Cut Fwd end of tube as per dwg.

VERIFY MEASUREMENT BEFORE CUTTING



10-1-18

W/O:		WORK ORDER CHANGES					
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
10.01.20	200	LENGTH IS 179.35" TOTAL RL Process	GP 10.01.20 per QSI 042	Acceptable. REMAINING DIMS OK		S 10/01/20	GP 10.01.20 per QSI 042	S 10/01/20

NOTE: Date & initial all entries

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Item ID: D119-646-243

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Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00

Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

210

0.00



Skidtubes

Skidtubes

Memo

0.00

1- Buff out marks left from bending

2- Drill Fwd cap holes using DT8215. Open Fwd and Aft cap holes to 0.208"

3- Open Fwd saddle holes to finished size as per dwg

4- Drill Fwd x-bolt hole and open to finished size. (Holes must be laid out manually)

5- Drill towing hole and open to finished size. (Holes must be laid out manually)

6- Open Aft float holes 0.391" as per dwg D3905 detail G and section F-F

7- Deburr, blow out chips from inside of tube.

220

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

⇒ 8/10/120



10-1-20



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Work Order ID 54886

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Item ID: D119-646-243

Accept



Setup Start



Revision ID:

Stop



Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010 Start Qty: 1.00

Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00

Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

224

0.00



Skidtubes

Memo

0.00

Skidtubes

1- Countersink x-bolt holes as per dwg

BE 10/01/21

2- Remove alodine prepare for welding

BE 10/01/21

3- Insert x-bolt spacers

BE 10/01/21

4- Weld x-bolt spacer as per dwg

A/R Alum rod Batch: m112860

BE 10/01/21

5- Grind welds flush as per dwg

AWM 10-1-21

6- Counter bore x-bolt holes as per dwg

7- Deburr

225

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

SD 10/01/21

Quality Control



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 54886

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Page 8

Item ID: D119-646-243

Accept

Setup Start

Revision ID:

Stop

Item Name: Replacement Float Skidtube w/ Training Wearpiates

Start Date: 05/01/2010 Start Qty: 1.00

Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00

Customer:

Reference:

Run Start

Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

226

QC10- Inspect visual per QS1004- ground welds

0.00

⇒ S10/01/21

(H)

φ



QC

Memo

0.00

Quality Control

227

Pressure Wash per QS1005 4.3

0.00

Bl 12-01-26

(D) φ



HandFinish

Memo

0.00

Hand Finishing

240

White Gloss(Ref:4.3.5.1) per QS1005 4.3-Alum

0.00

M113170

Bl 10-01-26

(D) φ



Powdercoat

Memo

0.00

START: 2:15pm

Temp: 320°

Fin: 2:45pm

Powder Coating

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Work Order ID 54886

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Item ID: D119-646-243

Accept

Setup Start

Revision ID:

Stop

Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010 Start Qty: 1.00

Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00

Customer:

Reference:

Run Start

Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

245

QC3- Inspect Part Finish

0.00

BR 10-02-3 ①



QC

Memo

0.00

Quality Control

250

0.00



HandFinish

Memo

0.00

BB 10-02-3 ①

Hand Finishing

1-Install inserts as per Dwg D3905.

Plb →

260

0.00



QC

QC5- Inspect part completeness to step on W/O

Memo

0.00

Stalys

④

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D119-646-243 PAR #: _____ Fault Category: Skid plates NCR: ☒ Yes No DQA: 10/02/17 Date: 10/02/17
 Resolution: re work Disposition: re work QA: N/C Closed: 10/02/18 Date: 10/02/18

NCR: 54886		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
10/2/11	# 288	During installation of inserts it was found that the 1 hole for the insert is too close to the Riser in the A/P	CP 10.02.01 QSI042	→ Buff out some of the riser to fit insert. → Re touch up A/P in per as 7005 → apply Incon Paint to cover up	 10-2-2 BR 10-02-2	S 10/02/03	CP 10.02.01 PWR QSI042	S 10/02/01
		R.C. process	CP 10.02.01	removal of P/A per as 7005	BR 10-2-2	S 10/2/03	CP 10.02.01	S 10/02/01

NOTE: Date & initial all entries

Work Order ID. 54886

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Item ID: D119-646-243

Accept

Setup Start

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Reference:

Run Start

Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

270

0.00



HandFinish

Hand Finishing

Memo

0.00

1-Install wearpads, gaskets and wearplates as per Dwg D3905. Put sikaflex in insert before installing bolts and washers.
A/R ☐ Sikaflex-240/-291 M112345
Sikaflex expire date: 10/08.

2- install plugs assembly as per dwg.

3 -Inspect for foreign objects as per QSI 024

4 -Install Aft Cap and seal with Sikaflex. Clean excess adhesive.
A/R ☐ Sikaflex-240/-291 M112345
Sikaflex expire date: 10/08.

BR 10-02-3 ①.

280

QC5- Inspect part completeness to step on W/O

0.00



QC

Quality Control

Memo

0.00

NA

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Run Start

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

285

Wing Walk as per dwg QSI005 4.4 Batch *M112902*

BL 10-02-4. ①



HandFinish

Memo

0.00

Hand Finishing

286

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

QC3 Solozas
QC5 Solozas

(H)

(H)

290

Identify as per dwg & Stock Location: _____

0.00



Packaging

Memo

0.00

Packaging

PP

54883

10-2-11 S

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

300

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/02/10

ME 10-2-11

W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries

Picklist Print

January 5, 2010 8:08:05 AM

Page 1

Work Order ID: 54886

Parent Item: D119-646-243

Parent Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg Part	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	-------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D2500-1-190

Manufactured

No

110

Each

96.0000

1.0000



Ext'n -1' Beam Tube 4"

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

LG

52319

Main Warehouse

ST

46468

93

93

3

3

170

Each

14.0000

1.0000

D3885-3

Manufactured

No



Standard Web

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

LG

47740

Main Warehouse

ST

51844

52425

1

1

13

1

12

10-1-6

1 10/1/15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

January 5, 2010 8:08:05 AM

Work Order ID: 54886



Parent Item: D119-646-243



Parent Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Fig/ Arch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3903-1		Manufactured	No			190	Each	64.0000	12.0000			
Spacer												

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
LG	54	
51849	54	
Main Warehouse		
ST	10	
47476	10	

12 DE 12/6/20

D3681-1	Manufactured	No				190	Each	70.0000	8.0000			
Spacer												

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
LG	68	
51920	20	
52898	48	
Main Warehouse		
ST	2	
47123	2	

8 DE 12/6/20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 5, 2010 8:08:05 AM

Work Order ID: 54886

Parent Item: D119-646-243

Parent Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3683-3		Purchased	No			250	Each	623.0000	12.0000			

Insert

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

623

47805 ✓

623

ALS4-1032-130

Purchased

No

250

Each

2,717.000 10.0000



Insert

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

2717

110511 ✓

2717

D2855-3

Manufactured

No

270

Each

15.0000 2.0000



Cap

Warehouse Loc Qty Loc Code

Location

Main Warehouse

fp5

15

52281 ✓

15

12. PK 10-02-3

10 PK 10-02-3.

BR.
2. 10-02-3.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 5, 2010 8:08:05 AM

Work Order ID: 54886

Parent Item: D119-646-243

Parent Item Name: Replacement Float Skidtube w/ Training Wearplates



Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC



Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3672-1		Manufactured	No			270	Each	1,744.000	4.0000			
												
Phenolic Washer												

Warehouse	Loc Qty	Loc Code
<u>Location</u>		
Main Warehouse		
ST	1244	
39275	19	
42329	5	
47628 ✓	220	
52505	1000	
Main Warehouse		
ST117	500	
51674	500	

4 BK 10-02-3.

D3846-1		Manufactured	No			270	Each	51.0000	1.0000			
												
GASKET												

Warehouse	Loc Qty	Loc Code
<u>Location</u>		
Main Warehouse		
ST	19	
47806	11	
51827 ✓	8	
Main Warehouse		
ST236B	32	
53735	32	

1 BK 10-02-3.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 5, 2010 8:08:05 AM

Work Order ID: 54886



Parent Item: D119-646-243



Parent Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3846-11		Manufactured	No			270	Each	29.0000	1.0000			
GASKET												

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
FP	18	
51833 ✓	18	
Main Warehouse		
ST	11	
47807	11	

1 *10-02-3*

D3847-1		Manufactured	No			270	Each	37.0000	1.0000			
WEARPAD												

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	37	
47808	4	
51823 ✓	33	

1 *10-02-3*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 5, 2010 8:08:05 AM

Work Order ID: 54886



Parent Item: D119-646-243



Parent Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replaces Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3847-11 		Manufactured	No			270	Each	19.0000	1.0000			
WEARPAD												

Warehouse Loc Qty Loc Code

Location

Main Warehouse

FP

17

51824 ✓

17

Main Warehouse

ST

2

47809

2

270

Each

2.0000

1.0000

D3849-047

Manufactured No



WEARPLATE

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

2

51837 ✓

2

1 Bl 10-02-3.

1 Bl 10-02-3.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 5, 2010 8:08:05 AM

Work Order ID: 54886



Parent Item: D119-646-243



Parent Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	-----------------	----------------	--------------------------	---------------	----------------	--------

D3849-045		Manufactured	No			270	Each	3.0000	1.0000			
-----------	--	--------------	----	--	--	-----	------	--------	--------	--	--	--



AFT WEARPLATE ASSY, FLOATGEAR

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST 3

47811 1

51836 ✓ 2

D3904-1		Manufactured	No			270	Each	301.0000	16.0000			
---------	--	--------------	----	--	--	-----	------	----------	---------	--	--	--



Washer

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST 1

48374 1

Main Warehouse

ST136 300

51875 ✓ 300

1 BL 10-02-3.

16 BL 10-02-3.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 5, 2010 8:08:05 AM

Work Order ID: 54886



Parent Item: D119-646-243



Parent Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Fig/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3672-3		Manufactured	No			270	Each	252.0000	12.0000			
Phenolic Washer												

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST 8

34471 8

Main Warehouse

ST117 244

51596 ✓ 244

270 Each 669.0000 14.0000

12. BK 10-02-3.

AN3C5A

Purchased

No



Bolt

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST 113C44 669

111424 8

111707 69

112314 1

113121 291

113149 300

14 BK 10-02-3.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 5, 2010 8:08:05 AM

Work Order ID: 54886



Parent Item: D119-646-243



Parent Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg Part	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN3C46A		Purchased	No			270	Each	104.0000	4.0000			
BOLT												

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse



ST 111918

104

106169

5

106176

9

113164

40

113302 ✓

50

270

Each

416.0000

10.0000

AN960C10L

Purchased

No



washer

Warehouse

Loc Qty

Loc Code

Location

OFFSHORE

FG

113288

100

103585

100

Main Warehouse

ST

316

112116

156

112612

160

NFS1149C0332R

10. 10-02-3.

1 BR 10-02-3.

3 BR 10-02-3.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 5, 2010 8:08:05 AM

Work Order ID: 54886



Parent Item: D119-646-243



Parent Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN960C416		Purchased	No			270	Each	542.0000	12.0000			
washer												

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	542	
100993 ✓	542	

12/10/10-02-3.

MS21043-3

Purchased

No

270

Each

4,542.000 8.0000



Nut

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
OFFSHORE		
FG	80	
103691	80	
Main Warehouse		
ST	4462	
111819	70	
112243	29	
112314 ✓	4363	

8/10/10-02-3.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 5, 2010 8:08:05 AM

Work Order ID: 54886



Parent Item: D119-646-243



Parent Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS27039C4-08		Purchased	No			270	Each	93.0000	12.0000			
SCREW												

Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

ST

93

17831 ✓

93

012/10-02-3.

AN3C50A

Purchased

No

270

Each

70.0000

4.0000



Bolt

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

70

112046

5

112454

15

112761 ✓

50

4/10-02-3

D3411-3

Manufactured

No

270

Each

58.0000

16.0000



WASHER

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

58

51635

18

52597 ✓

40

16/10-02-3.

January 5, 2010 8:08:05 AM

Shop Packet Print

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

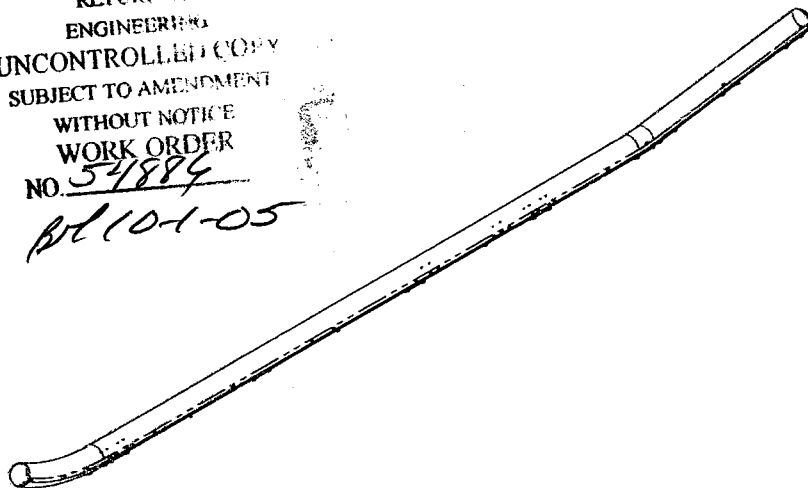
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

SHC-1111
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 54884
B110-1-05



D3905-041 FLOAT SKIDTUBE ASSY WITH WEARPAD (SHOWN)
D3905-043 FLOAT SKIDTUBE ASSY WITH WEARPLATE (SIMILAR)
D3905-045 FLOAT SKIDTUBE ASSY WITH TRAINING WEARPLATE (SIMILAR)

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSERTING D3885-3 FLOAT WEB
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D3905-041 = 40.7 lbs
D3905-043 = 47.0 lbs
D3905-045 = 47.3 lbs
- 8) WELD PER DART QSI 004
- 9) DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 8.5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020" DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 10) INSERT D3885-3 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH SIKAFLEX-2411-291 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP
- 11) INSERT D3492-045 PLUG ASSY INTO Ø0.197 HOLES (BOTH SIDES OF TUBE)
- 12) USE DART DRILL TEMPLATE DT8932 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARPLATE INSERTS. INSTALL AELS-1032-130 INTO D3905-11 ONLY. INSTALL AN3C5A BOLTS AND NAS1149C0332R WASHERS WITH SIKAFLEX-2411-291.

ITEM	QTY -041	QTY -043	QTY -045	P/N	DESCRIPTION
1	X			D3905-041	FLOAT SKIDTUBE ASSY WITH WEARPAD
2		X		D3905-043	FLOAT SKIDTUBE ASSY WITH WEARPLATE
3			X	D3905-045	FLOAT SKIDTUBE ASSY WITH TRAINING WEARPLATE
11	2	2	2	D2855-3	CAP
12	16	16		D3492-045	PLUG ASSY
13	4	4	4	D3672-1	PHENOLIC WASHER
14	8	8	8	D3681-1	SPACER
15	8	1	1	D3845-1	GASKET
16	1	1	1	D3846-11	GASKET
17	8	8	1	D3847-1	WEARPAD
18	1	1	1	D3847-11	WEARPAD
19		1		D3847-043	FWD WEARPLATE ASSY
20		1		D3847-045	CENTER WEARPLATE ASSY
21		1		D3847-049	AFT WEARPLATE ASSY
22			1	D3849-047	FWD WEARPLATE ASSY
23			1	D3849-045	AFT WEARPLATE ASSY
24	1	1	1	D3885-3	FLOAT WEB
25	1	1		D3905-11	FLOAT SKIDTUBE
26			1	D3905-13	FLOAT SKIDTUBE
27	12	12	12	D3903-1	SPACER
28			16	D3904-1	WASHER
29	12	12	12	D3672-3	WASHER
30	12	12	12	D3683-3	INSERT
31			16	D3411-3	WASHER
41	42	42	10	ALS4-1032-130	INSERT
42	46	46	14	AN3C5A	BOLT
43			4	AN3C46A	BOLT
44			4	AN3C50A	BOLT
45	46	46	10	NAS1149C0332R	WASHER (OR AN560C10L)
46	12	12	12	NAS1149C0463R	WASHER (OR AN560C416)
47			8	MS21043-3	NUT
48	12	12	12	MS27039C4-08	SCREW

RELEASED
10/6/15

B	REVISED PART LIST: ALS4-1032-130 WAS AELS-1032-130 (ZN A6-5, A5-6, C5-7, C3-7, A5-7). ADD DT8932 (ZN A8-1); D2855-3 WAS D2575 (ZN C8-2, C1-2, C8-3, C1-3, C8-4, C1-4); AN3C5A WAS AN3C4A (ZN C7-2, C1-2, C7-3, C1-3, C7-4, C1-4); D3849-047 WAS D3845-041 (ZN B3-4); ADD D3411-3 (ZN B3-4); ADD AN3C50A (ZN B3-4); Ø0.313 WAS Ø0.328 (B2-5, B2-6, C2-7, A8-7 & D7-8). REVISED NOTE 4 (ZN A8-7)	RF	09.06.30
A	NEW ISSUE	RF	09.03.30
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED	RF	DRAWING NO.	REV. B
MFG. APPR.	RF	D3905	SHEET 1 OF 8
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	A119 FLOAT SKIDTUBE ASSY NTS	
DATE	09.06.30	COPYRIGHT © 2009 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS UNCLASSIFIED AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE REPRODUCED FOR ANY PURPOSE OR FOR COMMERCIAL USE WITHOUT THE WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



RELEASED
10/07/15

WFO 54886
DART AEROSPACE USA, INC.
PORT HADLOCK, WA

DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED	RF	DRAWING NO.	REV. B
MFG. APPR.		D3905	SHEET 2 OF 8
APPROVED		TITLE	SCALE
DE APPR.		A119 FLOAT SKIDTUBE ASSY	NTS
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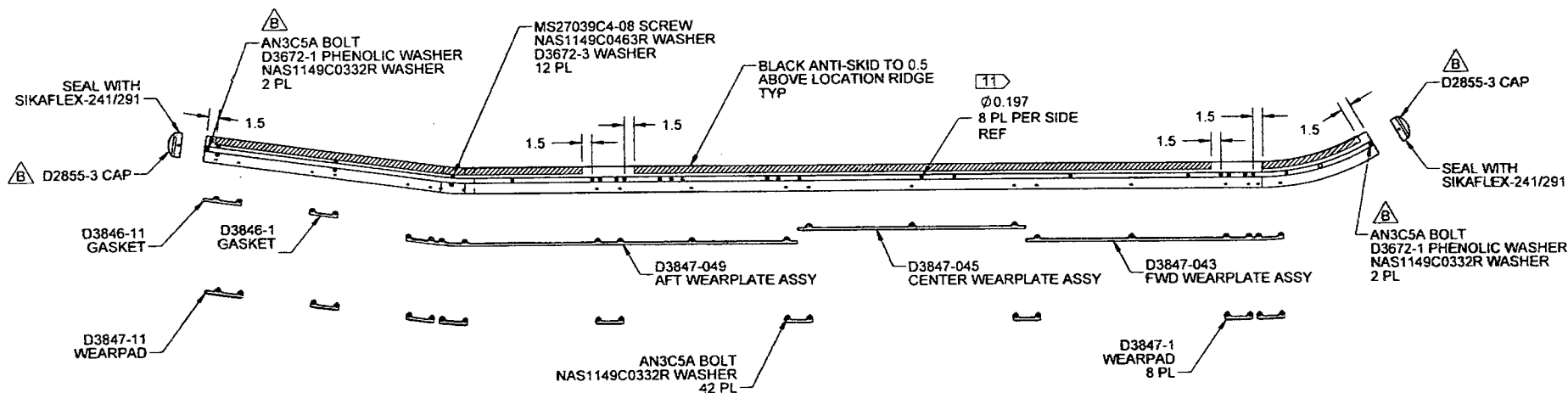
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3905-043 FLOAT SKIDTUBE ASSY WITH WEARPLATE
(MAKE FROM D3905-11 SKIDTUBE)

RELEASED
09/07/15

W/O 54886

DESIGN	RF	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
DRAWN	RF		
CHECKED	PH	DRAWING NO. D3905	REV. B
MFG. APPR.	PH	TITLE A119 FLOAT SKIDTUBE ASSY	SHEET 3 OF 8
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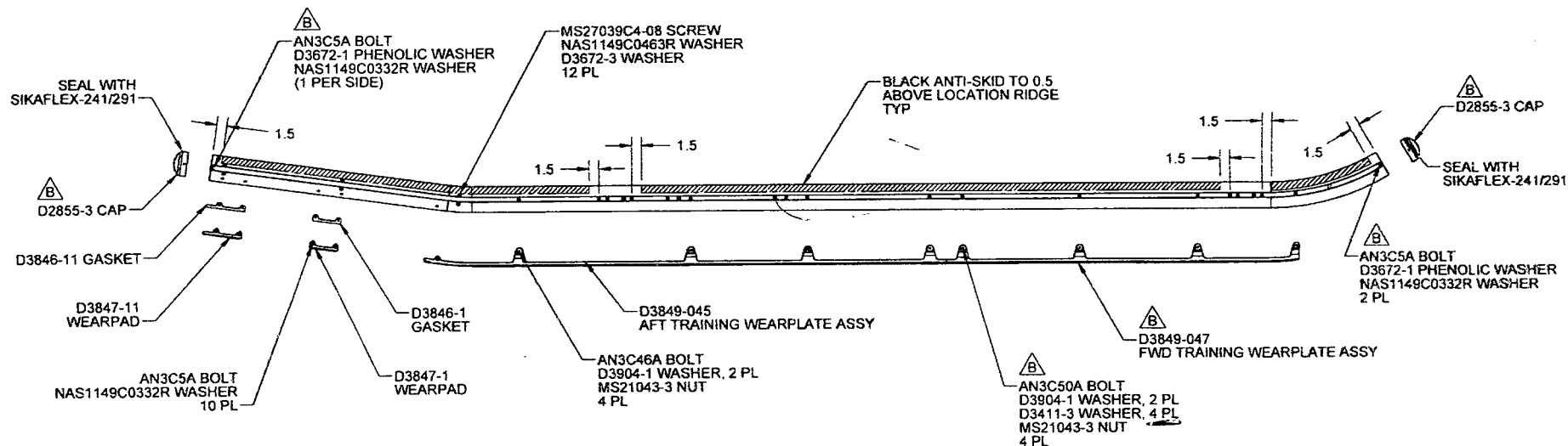
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3905-045 FLOAT SKIDTUBE ASSY WITH TRAINING WEARPLATE
(MAKE FROM D3905-13 SKIDTUBE)

RELEASED
9/17/15

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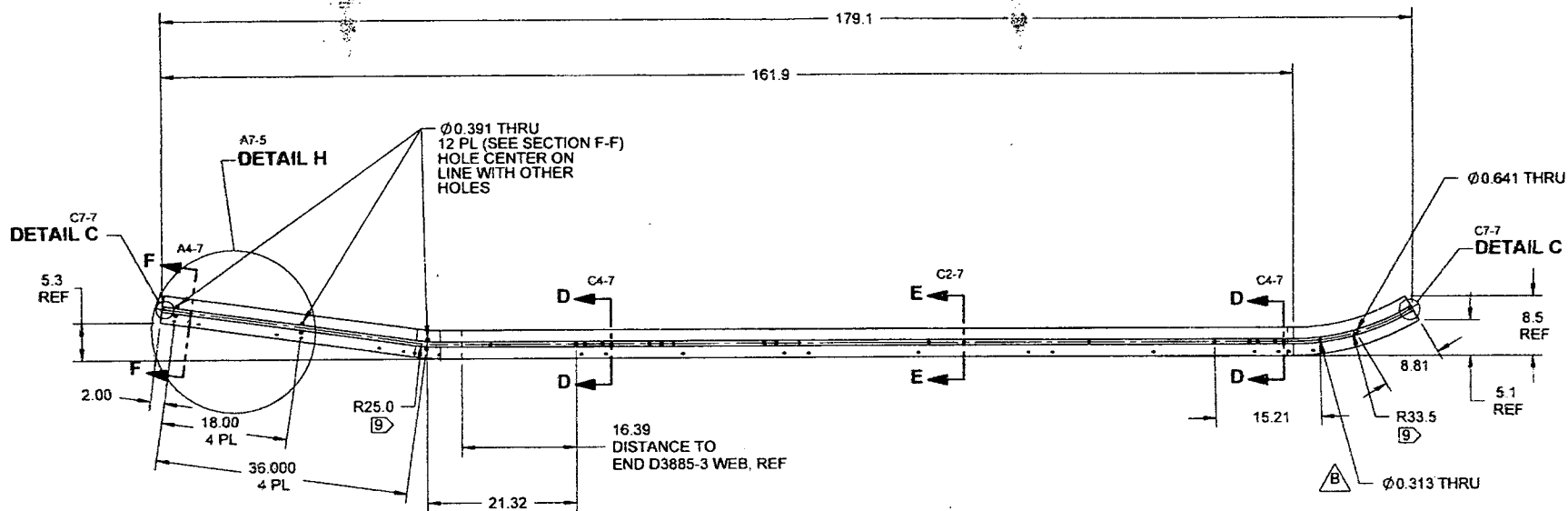
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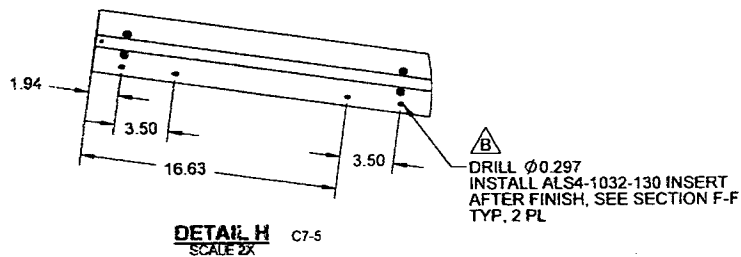
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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D3905-11 FLOAT SKIDTUBE
(MAKE FROM D3905-1 TUBE)



RELEASED
09/07/15

W10 5488C

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NOTE: Date & initial all entries

A7-6
DETAIL G

C7-7
DETAIL C

5.3
REF

2.00

18.00
4 PL

36.00
4 PL

R25.0

21.32

16.39
DISTANCE TO
END D3885-3 WEB, REF

179.1

161.9

C4-7
D

C2-7
E

C4-7
D

Ø0.641 THRU

C7-7
DETAIL C

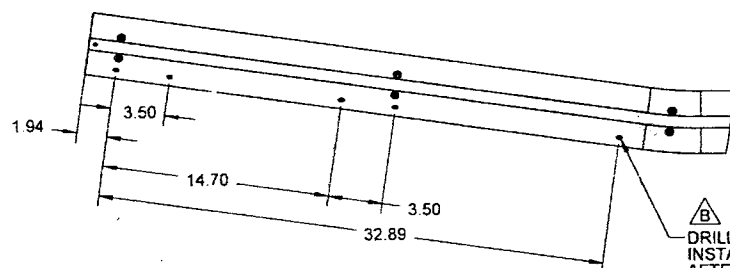
8.5
REF

8.81
5.1
REF

R33.5

Ø0.313 THRU

D3905-13 FLOAT SKIDTUBE
(MAKE FROM D3905-1 TUBE)



DETAIL G
SCALE 2X C8-6

DRILL Ø0.297
INSTALL ALS4-1032-130 INSERT
AFTER FINISH, SEE SECTION F-F
TYP, 2 PL

RELEASED
09/07/13

W/O 54886

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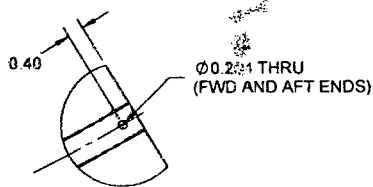
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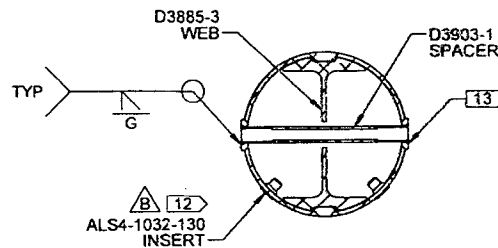
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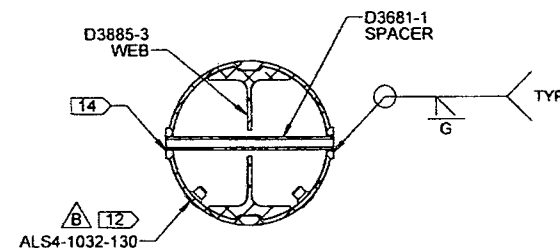
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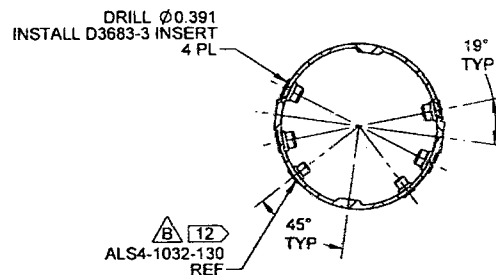
DETAIL C
SCALE 4X
C1-5
C8-5
C8-6
C1-6



SECTION D-D
SCALE 4X
(FOR 12 x Ø0.375 HOLES
PER SKIDTUBE)
C5-5
C2-5
C5-6
C2-6



SECTION E-E
SCALE 4X
(FOR 8 x Ø0.313 HOLES
PER SKIDTUBE)
C4-5
C4-6
B



SECTION F-F
SCALE 4X
C7-6
C7-5

NOTES:

13) AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.375 HOLES ONLY:

- CHAMFER HOLES Ø0.475 x 45° (BOTH SIDES)
- INSERT D3903-1 SPACER
- WELD INTO PLACE AND GRIND FLUSH
- C'BORE TO 0.313 x 0.75 DEEP
- DEBURR HOLES

- 14) AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.313 HOLES ONLY:
- CHAMFER HOLES Ø0.354 x 45° OR 0.050 DEEP x 45° (BOTH SIDES)
- INSERT D3681-1 SPACER
- WELD INTO PLACE AND GRIND FLUSH
- DEBURR HOLES

RELEASED
09/06/30

W10 54886

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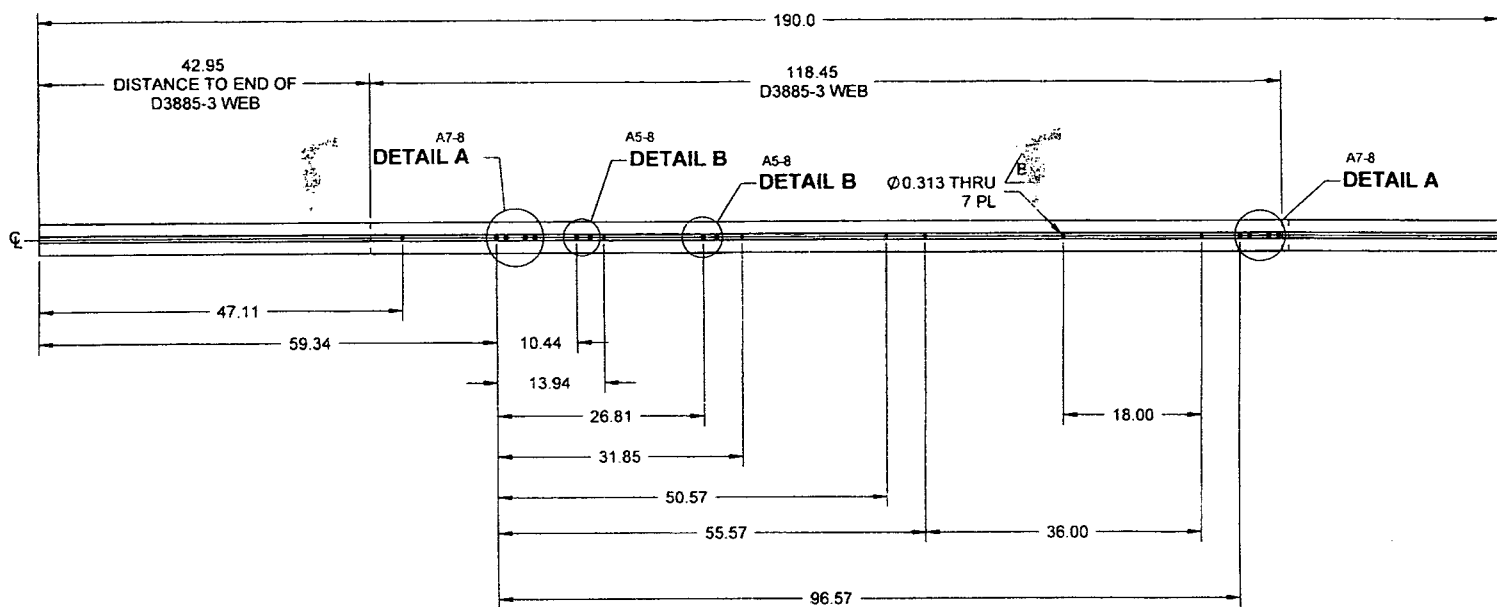
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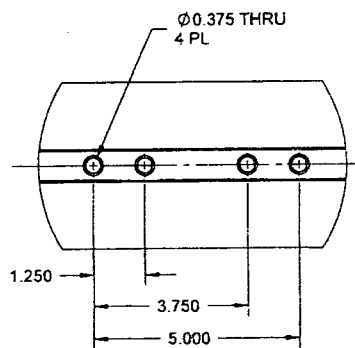
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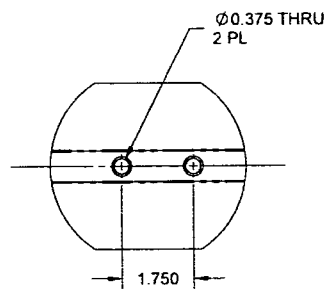
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D3905-1 TUBE
(MAKE FROM D2500-1-190 EXTRUSION)



DETAIL A D6-8
SCALE 4X D2-8



DETAIL B D5-8
SCALE 4X D4-8

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09/01/15/103

w/lo 54886

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

NO. 217

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: 52996
Part number: D119-646-243
Description: 119 skid tube
Welding Process: Tig[☒] Mig[]
Base material: Aluminium
Current: AC[☒] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[]
Penetration: pass[☒] fail[]

UNACCEPTABLE

Cracks: pass[☒] fail[]
Undercut: pass[☒] fail[]
Pin holes: pass[☒] fail[]
Overlap (cold lap): pass[☒] fail[]
Porosity (surface): pass[☒] fail[]
Coloration: pass[☒] fail[]

Qualifier Pat. Dymally Date of Test Coupon 09.11.16

Welder Barclay Elliott Date of Test Coupon 09.11.16

The above named individual is qualified in accordance with AWS D17.1.2001 to weld